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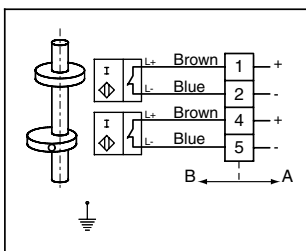
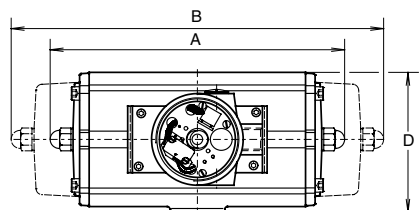
04 50 66 70 42
Info@Mecatork.fr

EL-O-MATIC ACTUATOR WITH HD SWITCH BOX INTRINSICALLY SAFE

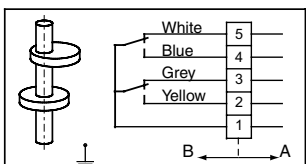
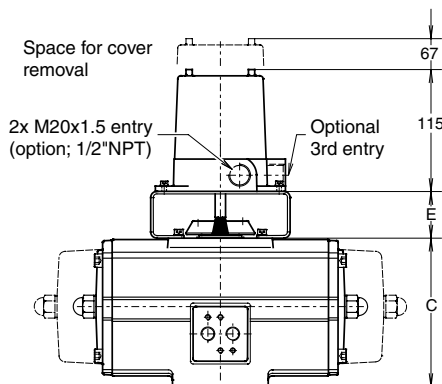
HDX

Data sheet

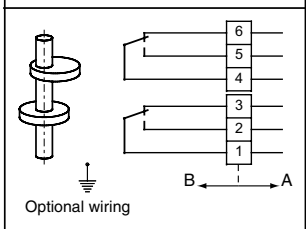
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Date: November 2009



2-Wire inductive switches



Basic wiring



Mechanical switches

B : Box wiring
A : Field wiring

Description

This heavy duty switch box encloses two proximity switches or two single pole double throw change over switches for indicating the fully open and fully closed actuator positions. The switch box is intrinsically safe to II 1G or II 2 G EEx ia IIC T6...T4 and II 1 D T 44 °C...T 80 °C and suitable for all zones with all gas groups and dust groups. The enclosure is ingress proof to IP67 and as such completely dust and water tight.

Operation

The sensors are operated by two vanes or cams on an extension of the actuator drive shaft and all mechanical parts are contained within the enclosure. Both switches are independently adjustable throughout the operating stroke, but are normally set to indicate at about 5° before each end position.

Installation

The two switches are prewired to a terminal block, which is easily accessible when the top cover is removed. Two electrical entries are included (third entry optional), one of which is fitted with a blanking plug. The switch box is mounted on top of the actuator with an accessory bracket according VDI/VDE 3845 (NAMUR), which incorporates a visual position indicator.

Protection

Method : Intrinsically safe
Marking : Ex II 1G or II 2 G
EEx ia IIC T6...T4
 Ex II 1 D T 44 °C...T 80 °C
Certificate : KEMA 04ATEX 1005 X

Technical data

Proximity switches

Slot type : SJ3,5-N, SJ5-N, SJ3,5-SN or SC3.5-G-N
V3 type : NJ2-V3-N
Voltage : 8 VDC (Ri = 1kOhm)
Amps : Switched, < 1 mA (output)
Standards : DIN EN 60947-5-6 (NAMUR)
: For SJ3,5-SN : VDE 660 Part 209

Mechanical switches

Voltage : U_i = 30 V
Current : I_i = 300 mA
Power : P_i = 1.2 W
Capacitance : C_i = 0 nF
Inductance : L_i = 0 μH

Housing

Material : Aluminium alloy, AlSi7Mg
Enclosure : IP 67 (IEC 529)
Cable entries : 2 x M20x1.5
Connections : Inside terminals (2.5 mm²)
Finish : Epoxy coating, black
Mounting : Acc. VDI/VDE 3845 (NAMUR), E12 has its own bracket

Temperature : -25° to +80°C
Actual upper temperature may be limited by the application. See certificate for more detailed info.

Identification

HD-box IS1 : SJ3,5-SN
HD-box IS2 : SJ3,5-N
HD-box IS3 : SJ5-N
HD-box IS6 : NJ2-V3-N
HD-box IS7 : V3 mechanical switch
HD-box IS10 : SC3.5-G-N

Dim. in mm.	Actuator type											
	E12	E25	E40	E65	E100	E200	E 350	E600	E950	E1600	P2500	P4000
A PD/ED	103	159	180	199	221	283	305	387	424	516	378	502
B PE/ES	118	172	204	249	267	360	387	477	517	637	570	834
C	60	80	93	105	118	143	181	220	259	297	356	380
D	60	83	96	107	117	137	182	217	242	275	358	390
E	45	45	45	45	45	45	45	55	55	55	55	55



www.El-O-matic.com

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Updated data sheets can be obtained from our website www.El-O-matic.com or from your nearest Valve Automation Center **USA**: +1 813 319 0266 **Europe**: +31 74 256 10 10 **Asia-Pacific**: +65 6501 4600



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